

Lion Heart
9/003/033



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Salt Lake District Office
2370 South 2300 West
Salt Lake City, Utah 84119

IN REPLY REFER TO:

3809
U-72299
(UT-025)

AUG 16 1995

CERTIFIED MAIL P 760 541 562
RETURN RECEIPT REQUESTED

Mr. Lon Thomas
American Stone
4040 South 300 West
Salt Lake City, Utah 84107

Dear Mr. Thomas:

Your Notice to conduct mining exploration operations under BLM's 3809 surface mining regulations was received on March 10, 1995 and amended on June 08, 1995. We have assigned case file number U-72299 for this operation. This Notice covers your proposed Lion Heart stone gathering operation in the S $\frac{1}{4}$, Sec. 8, T. 14 N., R. 16 W., SLM in western Box Elder County, Utah.

- Refer to this number in any future correspondence,
- Submit a report of accomplishments for activities in calendar year 1995
- Amend your notice if there are significant changes during your operation
- Submit a new notice for activities in 1996

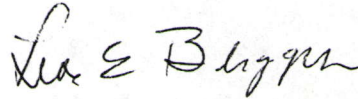
In accordance with 43 CFR 3809, we are accepting your notice of intent to conduct mining operations and advising you that your mining activity will occur concurrently with other activities on the public lands. A review of your proposed project by our resource staff both in the office and during several field inspections, raised the following concerns. When proceeding with your on-the-ground operations, please inform your field personnel of the following concerns and take the necessary precautions to prevent undue damage or degradation to these other resources:

1. A cultural resources field examination was conducted by our District Archeologist, Doug Melton on July 13, 1995 and no significant cultural sites were found. Should surface or subsurface cultural resources be discovered during your operations all activities will cease and you will notify the Bear River Resource Area Manager immediately.

2. In order to protect important wildlife habitat values, operations such as yours are restricted, by decision in the Box Elder Resource Management Plan, from any activity between December 1 and April 15 each year to protect crucial mule deer winter range and between March 15 and June 15 to protect sage grouse strutting grounds (leks). Please plan your annual operational period on these claims so that activity occurs from June 16 through November 30.
3. All trash resulting from your operation will be cleaned up and removed from the area. This is to be deposited in an approved landfill or receptacle. No oil or grease will be drained on the ground. Disposal of these wastes will be in an approved sanitary landfill. There is an existing surface disturbance from a previous mining operation on your Lion Heart # 1 claim area. Some debris is scattered about, please incorporate the clean up of the debris into your reclamation plan for the area.
4. A raptor study will be completed in the Spring of 1996 of the area involved in your proposed mining and the immediate surrounding area. Mitigation for raptors may be required as a result of the study and will be implemented as necessary.
5. The proposed new road should be constructed so as to not disturb any more than necessary and the old access to your mine area will be reclaimed. Our experience shows that a road that is surveyed in and follows standard practices for mine road construction, i.e. proper water handling system, surfacing material and etc., have the most longevity. Proper water handling devices will be installed at all stream channels and dry washes during road construction. The pit shall be designed and long term development plan formulated so that no ponding of water occurs on the pit floor or any benches. The top layer (at least six inches) of soil and vegetation will be removed and stockpiled for use during reclamation. Reclamation will consist of grading all disturbed areas so that the finished surface blends with the line and form of the surrounding topography. The stockpiled topsoil and vegetation will be spread evenly over the recontoured area then reseeded with the seed mixture approved by the authorized officer.
6. The proposed new road has the potential to contribute additional sediment loads to the Raft River. Construction operations should be completed in such a manner that all sediment from runoff or other dispersement will be contained on site and not allowed down stream.
7. The location of your proposed mining area is directly in the path of the trailing area used by permittee Hal Amidan's livestock from mid-May to the end of May. Please coordinate your mining operations during this time period to insure that his livestock can move freely in and out of the narrows.

If you have any questions, please feel free to contact Dan Washington at (801) 977-4300.

Sincerely,

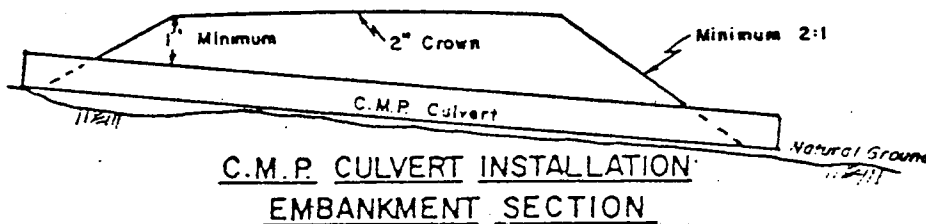
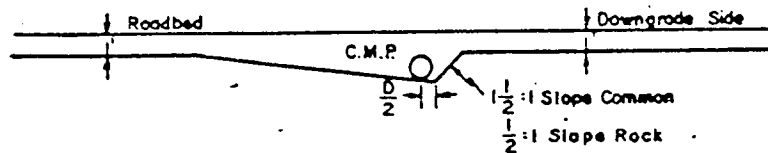
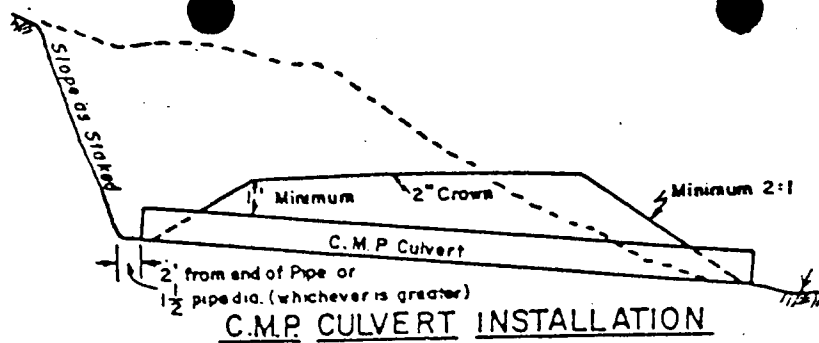


Leon E. Berggren
Bear River Resource Area Manager

Enclosures

Suggested road construction diagrams

cc: Lynn Kunzler
Utah Division of Oil, Gas, and Mining
Kiran L Bhayani
Utah Division of Water Quality

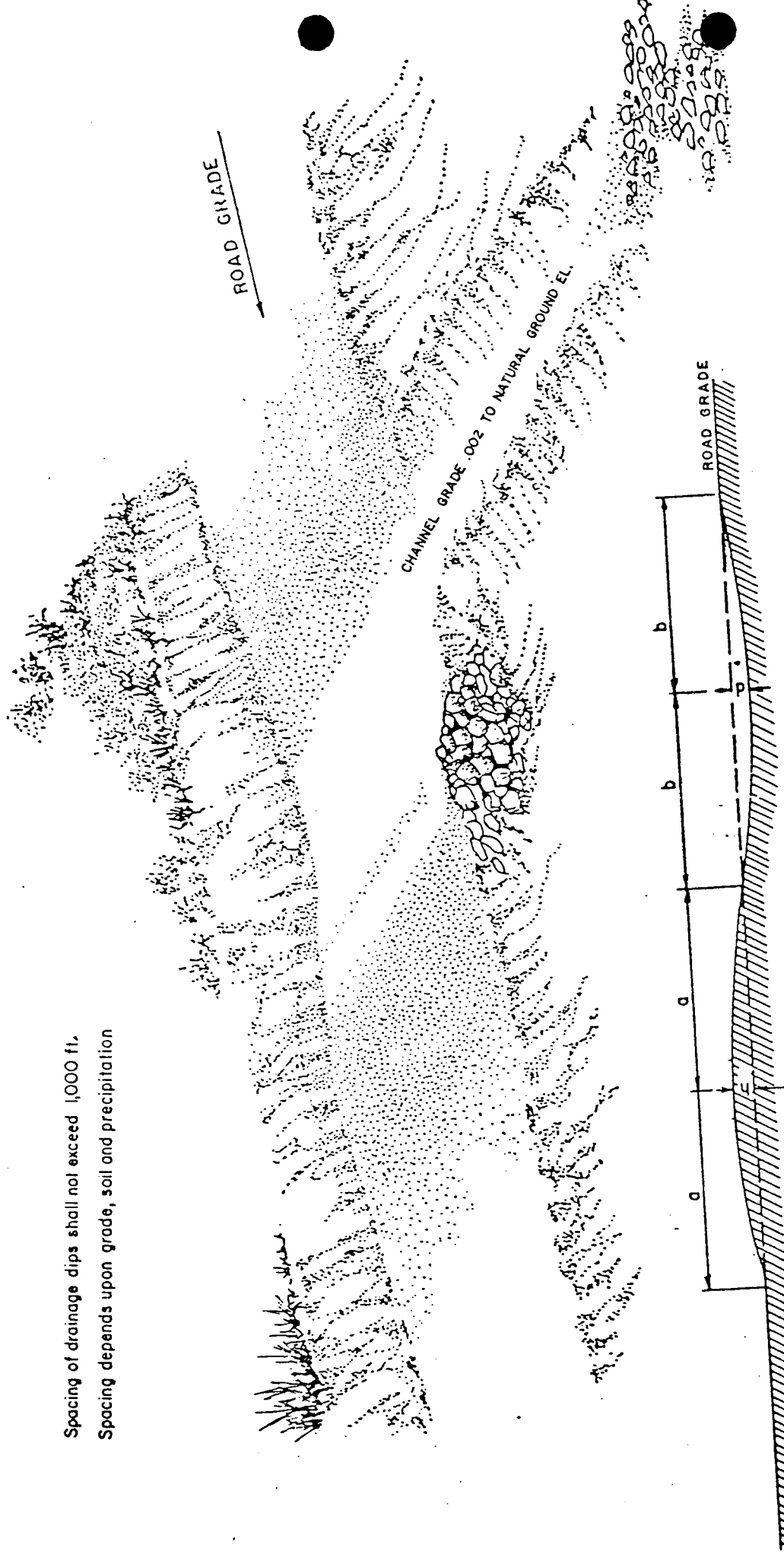


General Notes:

1. In bedding of C.M.P. Culverts, if the foundation is rock, excavate to depth of 8 in. below culvert grade and replace with earth cushion.
2. Minimum cover over culvert is one foot (1').
3. Minimum culvert diameter 18".
4. Minimum culvert spacing
 - (a) 1-2 % grade - 1000 feet minimum
 - (b) 2-4 % grade - 800 feet minimum
 - (c) 4-6 % grade - 600 feet minimum
 - (d) 6-8 % grade - 400 feet minimum
 - (e) 8-10 % grade - 250 feet minimum
5. Maximum grade 10 %.

TYPICAL CULVERT INSTALLATION

Spacing of drainage dips shall not exceed 1,000 ft.
 Spacing depends upon grade, soil and precipitation

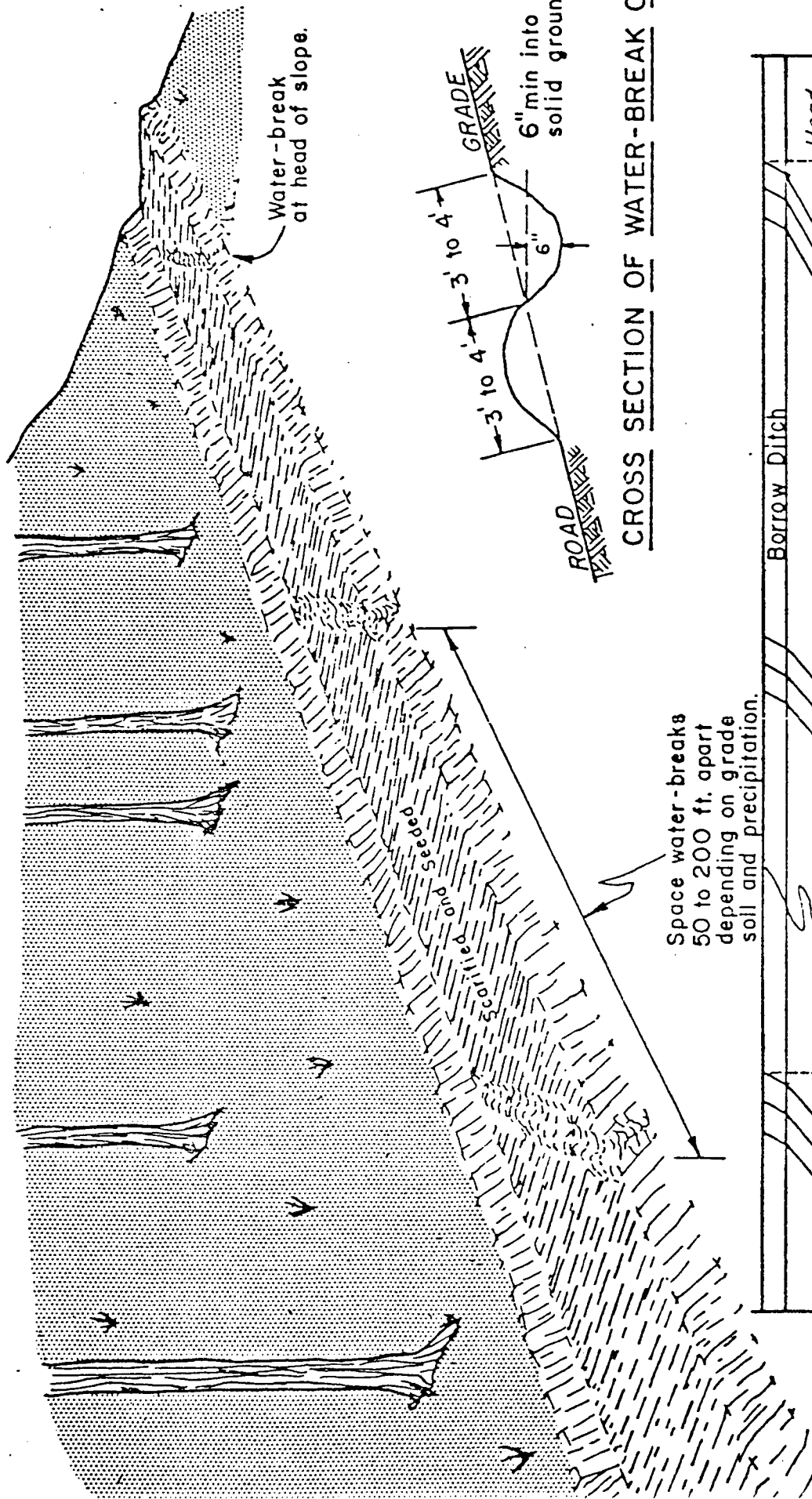


Road Gradient	d	h	a	b
2 %	0.6'	0.4'	10'	10'
4 %	1.0'	0.8'	14'	14'
6 %	1.2'	1.4'	16'	18'
8 %	2.0'	2.2'	22'	24'

NOTE: All waterbreak material shall be taken from the waterbreak dip or from the ditch line. H - min. of .5 ft.

CROSS SECTION OF WATER-BREAK ON $\frac{1}{2}$

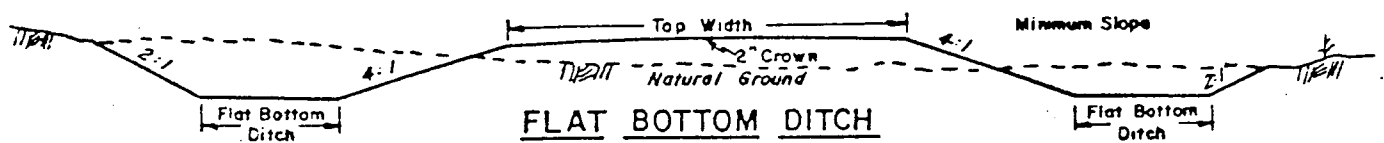
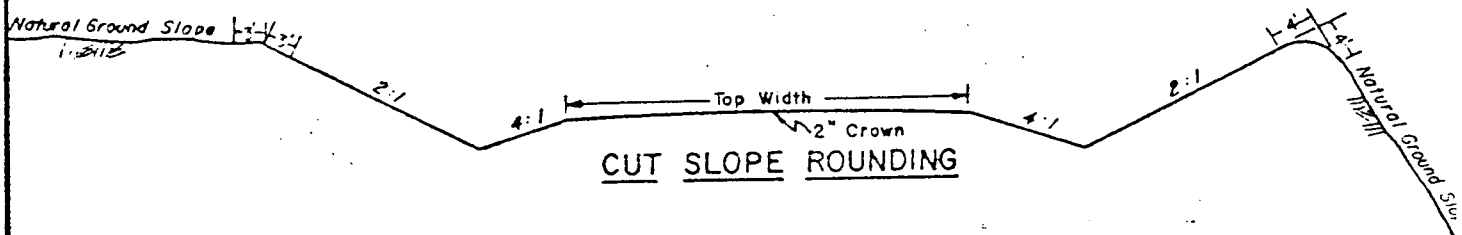
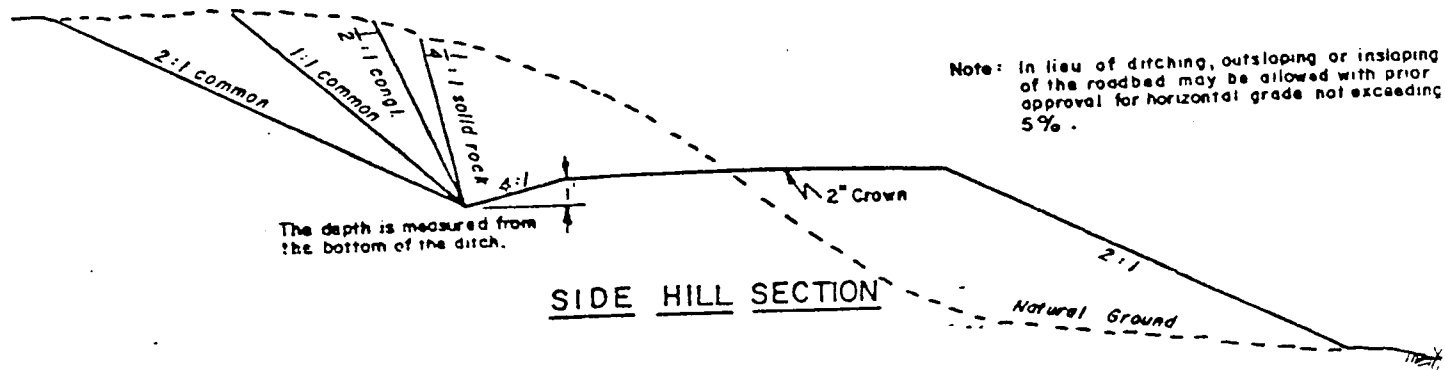
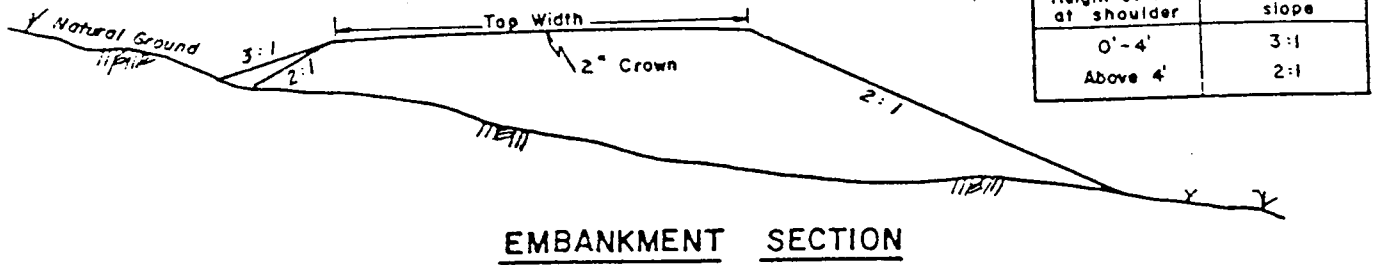
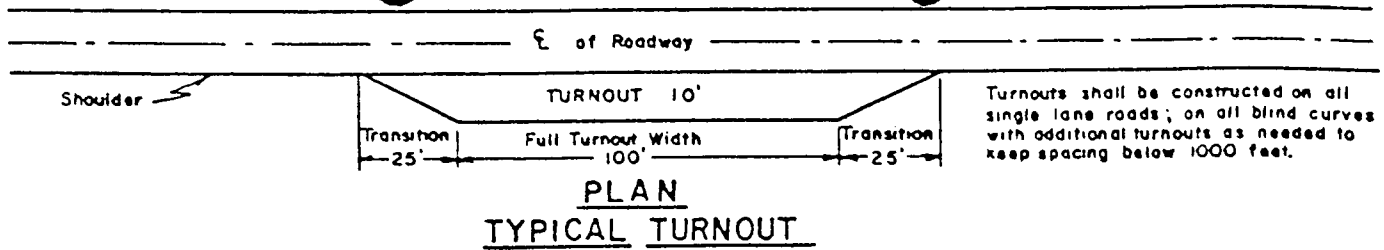
Thank "U" Mam For Slight To Moderate Slopes
 FOR ACCESS ROADS



CROSS SECTION OF WATER-BREAK ON

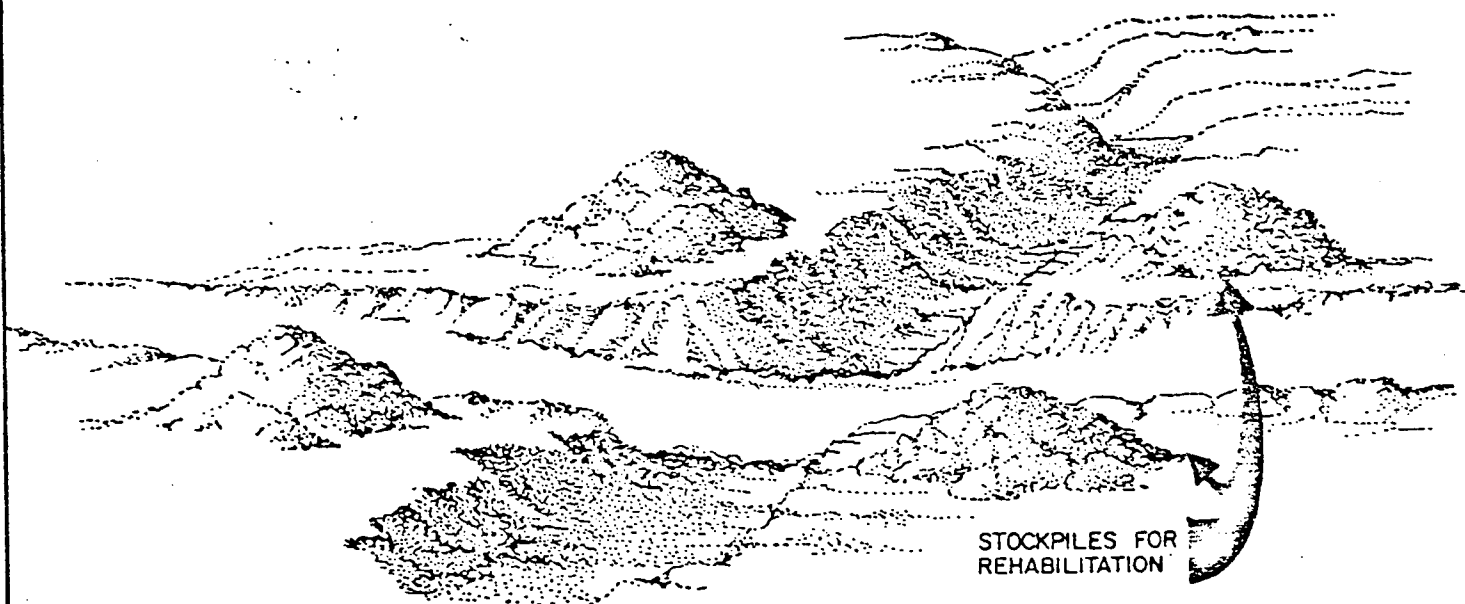
PLAN VIEW OF ROAD

WATER - BREAK CONSTRUCTION
 For Access Roads and Disturbed Slopes
 that will be closed to traffic after operator
 use.

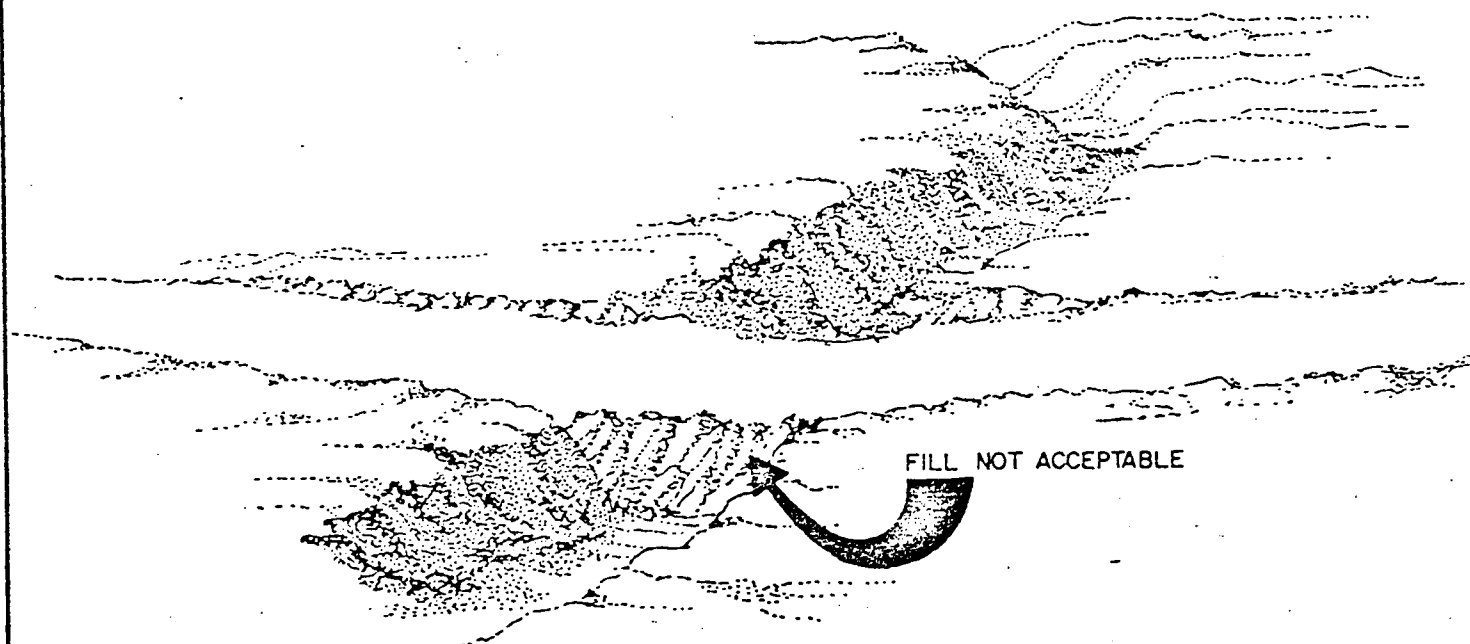


TYPICAL ROAD SECTION

TYPICAL DRY CREEK DRAINAGE CROSSING



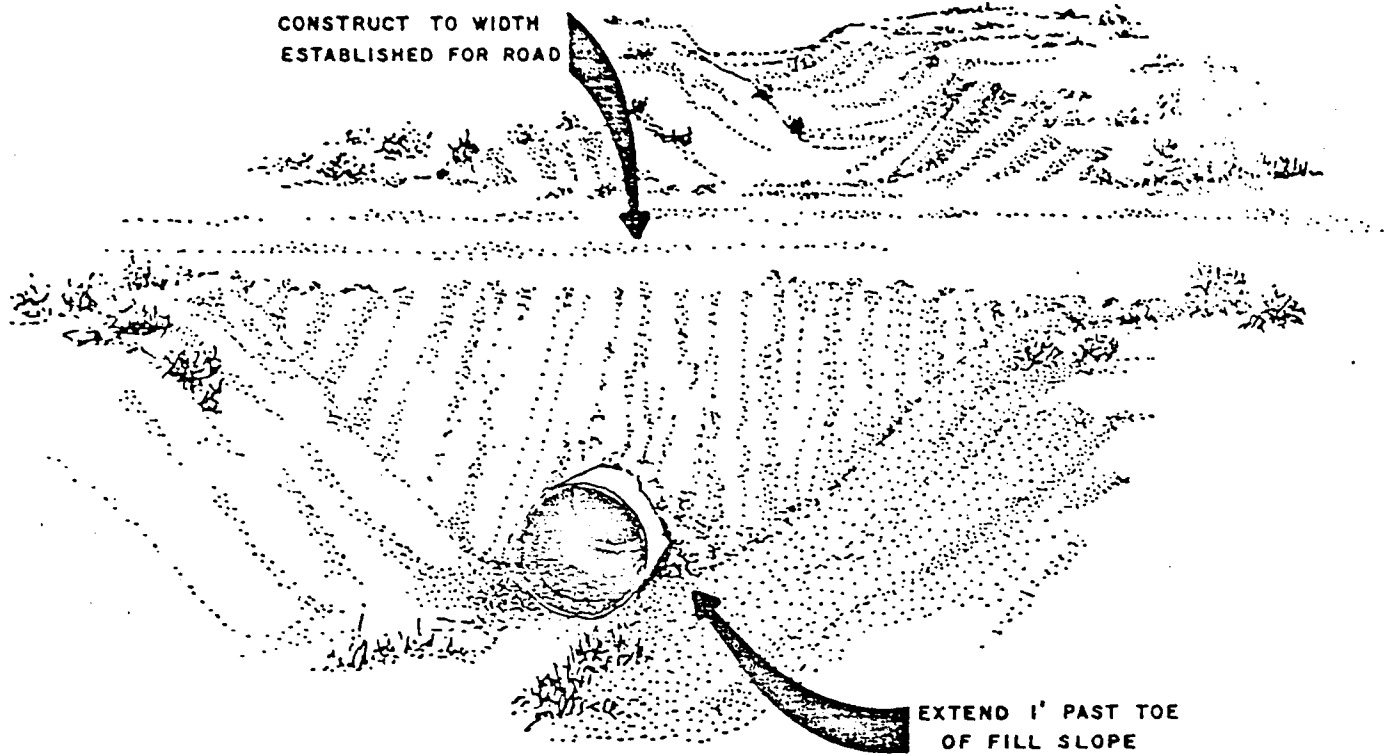
ACCEPTABLE



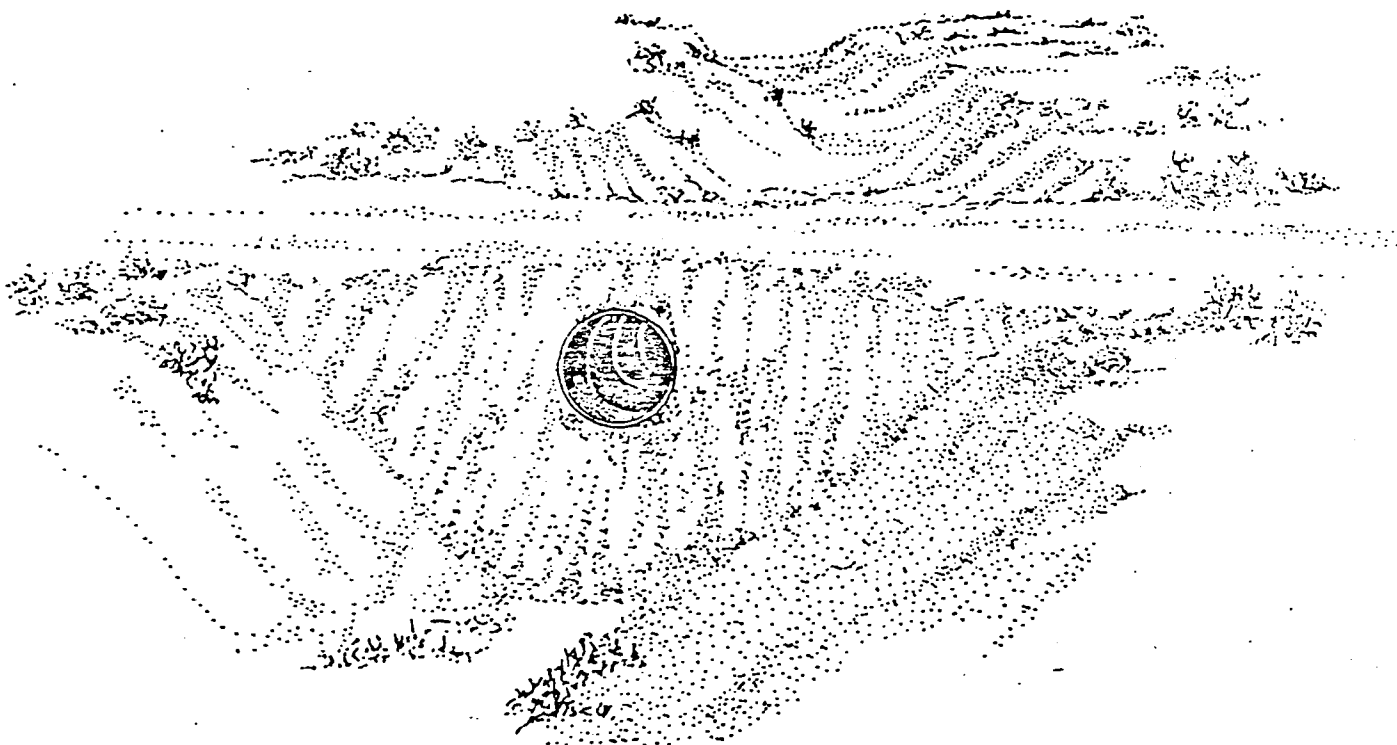
NOT ACCEPTABLE

TYPICAL CULVERT INSTALLATION

CONSTRUCT TO WIDTH
ESTABLISHED FOR ROAD



ACCEPTABLE



NOT ACCEPTABLE